

S/N: 10/647,698

Atty Dkt No. GP-302475 (GM0328PUS)

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A vehicle comprising:

a frame including at least one structural frame member;

a body panel forming a first portion of the vehicle exterior surface; and

a metal bumper mounted with respect to said at least one structural frame member for receiving a load in the event of an impact to a portion of the vehicle periphery and forming a second portion of the vehicle exterior surface;

wherein at least a portion of the bumper is characterized by a curvature;
and

wherein the first portion and the second portion of the vehicle exterior surface are substantially contiguous that is the result of exposure to fluid pressure.

2-3. (cancelled)

4. (currently amended) The vehicle of claim 1, wherein said at least one structural frame member includes two lower rails and two upper rails, and wherein the bumper is operatively connected to the two lower rails and the two upper rails such that ~~an impact a~~ load received by the bumper ~~in the event of a vehicle impact~~ is at least partially distributed to the two lower rails and the two upper rails.

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5. (original) The vehicle of claim 4, wherein the bumper includes an inner panel and an outer panel operatively connected to the inner panel.

6. (original) The vehicle of claim 5, wherein the bumper includes an upper bumper bar portion, a lower bumper bar portion, and a portion interconnecting the upper bumper bar portion and the lower bumper bar portion.

7. (original) The vehicle of claim 6, wherein the inner panel and the outer panel each at least partially define the upper bumper bar portion, the lower bumper bar portion, and the portion interconnecting the upper bumper bar portion and the lower bumper bar portion.

8. (original) The vehicle of claim 1, wherein the bumper includes an inner panel and an outer panel operatively connected to the inner panel such that the inner panel and the outer panel define a cavity therebetween.

9. (original) The vehicle of claim 8, wherein the inner panel is characterized by strengthening formations.

10. (original) The vehicle of claim 9, wherein the inner panel or the outer panel is formed using a process selected from the group consisting of quick plastic forming, superplastic forming and sheet hydroforming.

11. (currently amended) The vehicle of claim 1, wherein the bumper includes an integral tab defining a hole for the attachment of vehicle hardware.

12. (currently amended) A vehicle bumper comprising: a first one-piece member defining a first generally horizontally-oriented channel, a second generally horizontally-oriented channel spaced a first distance apart from the first generally horizontally-oriented channel, a first generally vertically oriented channel interconnecting the first and second generally horizontally oriented channels, and a second generally

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vertically oriented channel spaced a second distance apart from the first generally vertically oriented channel and interconnecting the first and second generally horizontally oriented channels a metal vehicle bumper surface characterized by a curvature formed using fluid pressure.

13. (currently amended) The vehicle bumper of claim 12, further comprising an inner panel and an outer panel operatively connected to the inner panel, the outer panel defining the surface a second one-piece member closing the first and second generally horizontally oriented channels and the first and second generally vertically oriented channels.

14. (cancelled)

15. (currently amended) The vehicle bumper of claim 13, wherein the inner panel second one-piece member is characterized by strengthening formations.

16. (original) The vehicle bumper of claim 12, wherein the bumper is adapted to mount to a pair of upper rails and a pair of lower rails.

17. (withdrawn) A method of manufacturing a vehicle bumper, the method comprising: subjecting a metal blank to fluid pressure to form a bumper having a shape characterized by a curvature.

18. (withdrawn) The method of claim 17, wherein said subjecting a metal blank to fluid pressure includes superplastically deforming the metal blank.

19. (withdrawn) The method of claim 17, wherein said subjecting a metal blank to fluid pressure includes deforming the metal blank using quick plastic forming.

20. (withdrawn) The method of claim 17, wherein said subjecting a metal blank to fluid pressure includes sheet hydroforming the metal blank.

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21. (original) A vehicle comprising:

two upper rails and two lower rails; and

a metal bumper mounted with respect to the two upper rails and the two lower rails for receiving a load in the event of an impact to the periphery of the vehicle, the bumper having an outer panel and an inner panel operatively connected to the outer panel and at least partially corrugated;

wherein the inner panel and the outer panel are characterized by a curvature that is the result of exposure to fluid pressure.